Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for fabrication a semiconductor device, comprising the steps of:

forming a barrier conductor layer on a substrate;

exposing said barrier conductor layer to a first gas atmosphere containing a reducing gas and free of plasma at an elevated substrate temperature;

forming, after said step of exposing said barrier conductor layer to said first gas atmosphere, a metal film on said barrier conductor layer by a CVD process; and

exposing said metal film to a second gas atmosphere at an elevated substrate temperature.

2. (Original) A method as claimed in claim 1, wherein said first reducing gas atmosphere is selected from any of the group consisting of silane, ammonia and hydrogen.

3. (Original) A method as claimed in claim 1, wherein said step of exposing said barrier conductor layer to said first reducing gas atmosphere is conducted at a temperature of 250-500°C.

4. (Previously Amended) A method as claimed in claim 1, wherein said second gas atmosphere includes hydrogen and/or nitrogen.

5. (Previously Amended) A method as claimed in claim 1, wherein said step of exposing said metal film to said second gas atmosphere is conducted at a temperature of 250-500°C.

6. (Original) A method as claimed in claim 1, wherein said metal film is a Cu film.

7. (Original) A method as claimed in claim 1, wherein said barrier conductor layer is formed of any of Ta or TaN.

8. (Currently Amended) A method of fabricating a semiconductor device, comprising ~~the steps of~~:

forming a barrier conductor layer of any of tungsten nitride or tantalum nitride on a substrate;

exposing said barrier conductor layer to ~~a plasma~~ an atmosphere of a reducing gas free from plasma at an elevated temperature; and

forming, after said step of exposing said barrier conductor layer to said plasma, a metal film on said barrier conductor layer by a CVD process.

9. (Original) A method as claimed in claim 8, wherein said reducing gas is hydrogen.

10. (Cancel)

11. (Previously Amended) A method as claimed in claim 8, further comprising, after said step of forming said metal film, a thermal annealing process applied to said metal film.

12. (Original) A method as claimed in claim 11, wherein said thermal annealing

process is conducted at a temperature of 250-500°C.

13. (Original) A method as claimed in claim 8, wherein said metal film is formed of Cu.

14. (Currently Amended) A method of fabricating a semiconductor device, comprising ~~the steps of~~:

alternately and repeatedly forming, on a substrate, an insulating film, a barrier conductor layer of any of tungsten nitride and tantalum nitride, and a metal film, said metal film being formed by a CVD process,

wherein a step of exposing said barrier conductor film to ~~a plasma~~ an atmosphere of a reducing gas free from plasma at an elevated temperature is interposed between said step of forming said barrier conductor layer and said step of forming said metal film.

15. (Previously Presented) A method as claimed in claim 1, wherein said step of forming said barrier conductor layer is conducted by a PVD process.

16. (Previously Presented) A method as claimed in claim 1, wherein said second reducing gas atmosphere includes nitrogen.

17. (New) A method as claimed in claim 5, wherein said step of exposing said metal film to said second gas atmosphere is conducted under a pressure of about 40 Pa.